



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/467,210	12/20/1999	DAE-HEON KWON	678-405	2053
66547	7590	11/05/2007	EXAMINER	
THE FARRELL LAW FIRM, P.C. 333 EARLE OVINGTON BOULEVARD SUITE 701 UNIONDALE, NY 11553			USTARIS, JOSEPH G	
		ART UNIT	PAPER NUMBER	
		2623		
		MAIL DATE	DELIVERY MODE	
		11/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	09/467,210	KWON ET AL.
	Examiner Joseph G. Ustaris	Art Unit 2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 August 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12/20/1999 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment dated August 20, 2007 in application 09/467,210.

Applicant's arguments, see pages 2-5, filed August 20, 2007, with respect to the rejection(s) of claim(s) 1-3 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kikinis (US006243596B1) in view of Tsukamoto et al. (5,005,013), Lagoni et al. (US006141058A), Porco (4,873,712), Zato (4,465,902), and Reyes et al. (US005835578A).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (US006243596B1) in view of Tsukamoto et al. (5,005,013), Lagoni et al. (US006141058A), Porco (4,873,712), Zato (4,465,902), and Reyes et al. (US005835578A).

Regarding claim 1, Kikinis discloses a TV phone in which a television and a portable cellular phone are integrally combined (See Fig. 9-12; col. 17 lines 34-41;

Kikinis discloses a cellular phone in which a TV tuner and receiver is installed in a battery pack adaptor 100 to allow users to receive and view television programs), the TV phone comprising:

a Mobile Station Radio Frequency Unit (MRFU) (See Figs. 9-12; Kikinis's cellular phone) for demodulating a signal received through a forward channel, forming an audio conversion channel among the received radio-frequency electromagnetic signals to output the demodulated signal, and modulating and transmitting a signal in a reverse channel (Kikinis's cellular phone performs a two-way conversation in which CPU 401 continuously processes both incoming and outgoing audio data. The incoming voice signal is received through a forward channel, demodulated and outputted to the audio speaker and the outgoing voice signal (reply back) is modulated from microphone 203 and transmitted out on the reverse channel);

a Mobile Station Processor (MSP) (See Fig. 12, 401) for establishing a phone or TV mode in response to an input command (user selection) (See Figs. 9-12); and a display unit (See Fig. 12, LCD 202).

However, Kikinis does not disclose:

first, second and third call alarm modes;
demodulating a signal indicative of an incoming call;
a TV module for receiving and demodulating a desired TV channel signal among radio-frequency electromagnetic signals received in response to an input of a tuning signal, when the TV module operates by supply of a power supply voltage, to generate

a composite video signal, a composite synchronizing signal and a composite audio signal;

a TV control section for supplying the tuning signal corresponding to a channel selection command signal to the TV module, synchronizing On Screen Display (OSD) data corresponding to display control data and display data with the composite synchronizing signal to output the synchronized signal as a video signal;

the MSP generating the channel selection command signal stored in a predetermined memory area by setting the TV mode, and generating an alarm signaling a reception of the incoming call output from the MRFU according to at least one of the first, the second, and the third incoming call alarm modes,

wherein the first incoming call alarm mode comprises interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode, the second incoming call alarm mode comprises switching off and on, at a predetermined interval, the audio signal output from the TV module, and the third incoming call alarm mode comprises displaying one of an incoming call character message and a preset graphic message, at a specific region or an entire portion of the TV image viewing screen in accordance with controlling the TV control unit, and processing audio data output from the MRFU to output the processed audio data signal while supplying audio data to the MRFU; and

the display unit synchronizes the composite video signal from the TV module and the video signal from the TV control section with the composite synchronizing signal and

displaying the synchronized composite video signal and the video signal on an image viewing screen.

Tsukamoto shows a hand-held device with a TV module for receiving and demodulating a desired TV channel signal among radio-frequency electromagnetic signals received (antenna 2 receives a TV broadcast radio wave and a radio wave generated from a Radio transmission station of telephone office; Col. 3, lines 36-41) in response to an input of a tuning signal, when the TV module operates by supply of a power supply voltage (Col. 4, lines 4-10), to generate a composite video signal, a composite synchronizing signal and a composite audio signal (Col. 4, lines 1.0-21) and a TV control section for supplying the tuning signal corresponding to a channel selection command signal to the TV module, synchronizing On Screen Display (Timing Control Circuit 35) data corresponding to display control data and display data with the composite synchronizing signal to output the synchronized signal as a video signal (Fig. 2 & 14; Col. 4, lines 4-64; Col. 10, lines 4-40 and Col. 13, lines 25-62). Furthermore, Tsukamoto discloses a display unit 3 (Fig. 2 and 14) for synchronizing the composite video signal from the TV module and the video signal from the TV control section with the composite synchronizing signal and displaying the synchronized composite video signal and the video signal on an image viewing screen (Col. 14, lines 25-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kikinis's Video driver 402 with the LCD's video circuitry driver, as taught by Tsukamoto, so to take the advantage of the well known design of the LCD video circuitry driver to drive the LCD to display the received video signal.

Lagoni discloses a television/telephone system (Fig. 1) wherein the telephone network interface 126 detects and demodulates a signal indicative of an incoming call received through a pair of conductors Tip (T) and Ring (R) (Col. 4, lines 4-7 and lines 14-17) and a 3rd call alarm mode comprises displaying one of an incoming call character message (displays Caller ID; Col. 4, lines 23-31) and a preset graphic message (see Fig. 4). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kikinis' s cellular phone system to detect the incoming telephone signal and display an alert message, i.e. Calling ID, as taught by Lagoni, so to notify the user of an incoming call while watching the TV and also to give the user a choice to answer or not to answer the incoming call based on the displayed Caller Id while watching a TV program (Col. 1, lines 17-23).

Furthermore, that limitation "A Mobile Station Processor (MSP) for establishing a phone or TV mode in respond to an Input command, generating the channel selection command signal stored in a predetermined memory area by setting the TV mode, and generating a reception of incoming call output from the MRFU call according to at least one of a 1st, a 2nd, and a 3rd incoming call alarm modes, wherein the 3rd incoming call alarm mode comprises displaying one of an incoming call character message and a preset graphic message, at a specific region or an entire portion of the TV image viewing screen in accordance with controlling the TV control unit, and processing audio data outputted from the MRFU to output the processed audio data signal while supplying audio data to the MRFU", is further met by Lagoni because Lagoni's controller 110 (MSP) establishes a TV mode in response to an input command from the RC 125,

generating the channel-related data (channel selection command signal) stored in a predetermined RAM (memory area) (Col. 3, lines 1-3) by setting the switched ON of the Television receiver (TV mode) thereby allowing for viewing of a TV image (if TV receiver is switched ON, i.e., active and able to display a picture (Col. 4, lines 25-28), and upon reception of an incoming call/signal from the telephone network interface 126 (MRFU) (Col. 4, lines 18-32), Controller 110 supplies the display control data via control line 141 to the OSD processor 140 (Col. 3, lines 61-65+) to display an incoming call character message (displays Caller ID; Col. 4, lines 23-31) at a specific region of a TV image-viewing screen (see Fig. 4) according to a Priority List Caller ID (preset incoming call alarm mode), and answering the call (processing audio data outputted from the MRFU to output the processed audio data signal while supplying audio data to the MRFU) by switching from TV mode to Phone mode.

Lagoni specifically further discloses that once the call is answered (see Fig. 5 at el. 530 indicates with "Yes" branching that a call is answered; Col. 4, lines 55-Col. 5, lines 18), Lagoni's Telephone Network Interface Unit 126 is getting/getting/continuing/resuming back to its previous state of monitoring a future incoming caller-id message of anew incoming call.

Porco discloses "a 1st call alarm mode" and "wherein the 1st incoming call alarm mode comprises interrupting a power supply voltage supplied to the Audio/Radio module and automatically switching from audio/Radio mode to the phone mode" (Col. 3, lines 44-Col. 5, lines 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kikinis in view of Tsukamoto and

Lagoni with Porco, so to interrupt the associated secondary accessory (e.g. TV) whose concurrent operation would be interfering and distracting during operation of the telephone, as suggested by Porco (Col. 1, lines 1-13).

Zato discloses a television/phone system. Zato discloses a second incoming call alarm mode that switches on the audio signal output from the TV module (See Fig. 1; col. 3 lines 16-40, the system provide an audible tone indicating incoming calls). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system disclosed by Kikinis in view of Tsukamoto and Lagoni to have a second incoming call alarm mode that switches on the audio signal output from the TV module, as taught by Zato, in order ensure that the user is aware of an incoming call by notify the user via audible and visual means (See col. 3 lines 41-43).

Reyes et al. (Reyes) discloses a telephone system. Reyes discloses an alarm mode comprises switching off and on, at a predetermined interval (2 sec ring, 4 sec silence), the audio signal output (ring) from the module (See col. 4 lines 20-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tone signal generator disclosed by Kikinis in view of Tsukamoto, Lagoni, and Zato to switch off and on, at a predetermined interval, the audio signal output from the TV module, as taught by Reyes, in order to provide a more efficient means of identifying an incoming call (See col. 4 lines 1-10).

Regarding claim 2, in view of the discussion in claim 1, neither Kikinis nor Lagoni clearly disclose a power switch disposed between the TV module and a power supply

unit, the power switch being switched under the control of the MSP (Mobile Station Processor) to turn ON/OFF the TV module.

Tsukamoto further discloses a power switch (switch 6 'TV OFF mode', Fig. 1) disposed between the TV module and the AC power, supply (not show), the power switch being switched under the control of the CPU 23 (MSP) to turn ON/OFF the display 3 (Fig. 9, steps B1, B2, B3, B4 for TV OFF mode, B7 and B8 for ON; Col. 9, lines 59-Col. 10, lines 3 and Col. 12, lines 54-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to supply a power switch, as taught by Tsukamoto, so the Kikinis's TV-Phone is able to display message of the incoming call while the system is under power saving mode, i.e., standby/sleep mode of powering off the display and the TV mode is OFF but not the main unit.

Regarding claim 3, in view of the discussion in claim 1, neither Kikinis nor Lagoni clearly disclose the a Radio Frequency Switch (RFSW) allowing an antenna to be connected to both the TV module and the Mobile Station RF unit (MRFU) in response to establishment of the TV mode of the Mobile Station processor (MSP) and allowing the antenna to be connected to only the MRFU in response to the establishment of the phone mode of the MSP.

Tsukamoto discloses an antenna 2 receives a TV broadcast Radio wave and a radio wave generated from a radio transmission station of a telephone service (Fig. 1; Col. 3, lines 12-39; Fig. 9 shows an algorithm of how the switch 6 function, i.e., switch 6 on VHF/UHF position, works with CPU 23) in response to the establishment of the TV

mode of the CPU 23 (MSP), and allowing the antenna 2 to be connected to only the Pager mode (MRFU) in response to the establishment of the Pager mode only (switch 6 on OFF position) of the CPU 23 (MSP). Thus, Tsukamoto' switch 6 is a RFSW.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kikinis' TV-phone with an RF switch/RFSW connects an antenna to the TV module and the Mobile Station RF unit (MRFU), as taught by Tsukamoto, so that the TV-phone receives both signals simultaneously, TV and phone, and allows user to view TV while the phone receiver works in the background to alert the viewer of an incoming call (Col. 13, lines 7-10).

Response to Arguments

4. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, applicant argues with respect to claims 1-3 that Porco does not disclose interrupting a power supply voltage supplied to the TV module and automatically switching from the TV mode to the phone mode. However, reading the claims in the broadest sense, Porco does meet that limitation in the claims. Porco discloses that power is interrupted to a secondary accessory (e.g. audio system/TV module) and is automatically switch to the phone mode whenever an incoming call occurs or when a call is being placed (See col. 3 line 44 – col. 5 line 27).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5 PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGU

October 29, 2007

Chris Kelley
CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600